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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/997,450

11/30/2001

Shamim M. Malik

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45159 7590 07/09/2008  
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EXAMINER

SEVERSON, RYAN J

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/997,450	<b>Applicant(s)</b> MALIK ET AL.	
	<b>Examiner</b> Ryan Severson	<b>Art Unit</b> 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13, 14, 17-19, 21, 24-27, 34 and 42-45 is/are pending in the application.
- 4a) Of the above claim(s) 1, 7-10, 13, 14, 17, 18, 26, 27, 34 and 42-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6, 19, 21, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/24/2008</u>   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 1, 7-10, 13, 14, 17, 18, 26, 27, 34, and 42-45 are directed to an invention that is independent or distinct from the invention elected in the response to restriction filed 06 July 2004. Accordingly, claim 1, 7-10, 13, 14, 17, 18, 26, 27, 34, and 42-45 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.
2. Specifically regarding claims 1 and 13, the claims recite, in the alternative, a compound of Ti, N, C, or Ti, N, O is implanted, then subsequently a layer of  $TiN_xC_y$  is disposed over the compound. As applicant is aware, claims are read in light of the specification. Upon reading the specification, it becomes clear that the layer of  $TiN_xC_y$  is only disposed over an implanted compound of Ti, N, C and not Ti, N, O. Therefore, since the specification provides no support for disposing a layer of  $TiN_xC_y$  over implanted Ti, N, O, the claims are interpreted as being drawn to the combination of the layer of  $TiN_xC_y$  disposed over implanted Ti, N, C. This combination was not elected in response to the restriction requirement and therefore claims 1 and 13 and all claims that depend therefrom are withdrawn from further consideration as being drawn to a non-elected invention.
3. Claims 2-6, 19, 21, 24, and 25 are the remaining claims that read on the elected invention and therefore have been examined on the merits.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 2-6, 19, 21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazarov et al. (6,110,204) in view of Shamim et al.**

*("Development of an energetic ion assisted mixing and deposition process for TiN<sub>x</sub> and diamondlike carbon films, using a co-axial geometry in plasma source ion implantation")*). Lazarov reference discloses the titanium-nitride-oxide (TiN<sub>x</sub>O<sub>y</sub>) compound disposed about a stent substrate substantially as claimed. However, Lazarov reference does not disclose the compound is implanted on a molecular level within the surface of the stent. Attention is drawn to Shamim et al., who teach implantation of various metallic compounds (including Ti, N, and O) within the surface of a metallic substrate to increase the ability of the compound to adhere to the substrate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have implanted the compound of Lazarov within the surface of the stent, as taught by Shamim et al., to increase the adhesion between the compound and the substrate (the stent).

6. Regarding claim 24, it is well-known in the art to use stainless steel as a material to make stents.

***Response to Arguments***

7. Applicant's arguments with respect to claims 19 and 21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Severson whose telephone number is (571)272-3142. The examiner can normally be reached on Monday - Friday 8:30-5:00.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. S./  
Examiner, Art Unit 3731

/Todd E Manahan/  
Supervisory Patent Examiner, Art Unit 3731